

**SUMMARY OF HYDROLOGIC CONDITIONS  
IN THE  
UPPER DELAWARE RIVER BASIN  
September 2009**

Prepared by the  
Office of the Delaware River Master  
Milford, Pennsylvania

Adjusted streamflow in the upper Delaware River Basin during September was in the normal range. The maximum daily mean discharge of 4,470 cfs was recorded on September 2. The minimum daily mean discharge was 1,760 cfs on September 21.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during September was 2,761 cfs, which is 138 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs, was 2,405 cfs, or 159 percent of median (water years 1971-2000).

On the basis of a 10-station average, precipitation during September was 2.22 inches, which is 55 percent of the 68-year average. The maximum daily-average precipitation during the month was 0.76 inches on September 27. Precipitation in the upper Delaware River Basin during the past 12 months was 5.54 inches more than the long-term average. Precipitation during September was 1.83 inches less than the long-term average for the month.

Combined storage October 1, 2009 in Pepacton, Cannonsville, and Neversink Reservoirs was 87 percent of capacity above the point of maximum depletion. The combined storage of 237 billion gallons was 21 billion gallons less than that of one month ago and 41 billion gallons more than that of one year ago. Median storage on the first day of October in 42 years of record is 178 billion gallons.

As part of statewide networks, the USGS operates ground-water observation wells in the Pennsylvania and New Jersey parts of the Delaware River Basin. Mean water levels during September were above average in 18 of 20 observation wells. Water levels in 12 of the wells were below August 2009 levels, and water levels in all of the wells were above September 2008 levels.

HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN

Compiled by the Office of the Delaware River Master, Milford, Pa.

(Preliminary data - subject to revision)

PRECIPITATION, IN INCHES

|       | Dec. 1940 to Sept. 2008 |            | October 2008 to September 2009 |            |                    |            |                           |            |
|-------|-------------------------|------------|--------------------------------|------------|--------------------|------------|---------------------------|------------|
|       | Average                 |            | Actual                         |            | Percent of average |            | Excess (+) or deficit (-) |            |
|       | Amount                  | Cumulative | Amount                         | Cumulative | By month           | Cumulative | By month                  | Cumulative |
| Oct.  | 3.61                    | 43.96      | 4.33                           | 49.50      | 120                | 113        | +0.72                     | +5.54      |
| Nov.  | 3.82                    | 40.35      | 2.18                           | 45.17      | 57                 | 112        | -1.64                     | +4.82      |
| Dec.  | 3.41                    | 36.53      | 6.17                           | 42.99      | 181                | 118        | +2.76                     | +6.46      |
| Jan.  | 3.05                    | 33.12      | 2.91                           | 36.82      | 95                 | 111        | -.14                      | +3.70      |
| Feb.  | 2.65                    | 30.07      | 1.51                           | 33.91      | 57                 | 113        | -1.14                     | +3.84      |
| Mar.  | 3.38                    | 27.42      | 2.53                           | 32.40      | 75                 | 118        | -.85                      | +4.98      |
| Apr.  | 3.78                    | 24.04      | *2.36                          | 29.87      | 62                 | 124        | -1.42                     | +5.83      |
| May   | 4.13                    | 20.26      | 5.66                           | 27.51      | 137                | 136        | +1.53                     | +7.25      |
| June  | 4.09                    | 16.13      | 7.19                           | 21.85      | 176                | 135        | +3.10                     | +5.72      |
| July  | 4.10                    | 12.04      | 6.32                           | 14.66      | 154                | 122        | +2.22                     | +2.62      |
| Aug.  | 3.89                    | 7.94       | 6.12                           | 8.34       | 157                | 105        | +2.23                     | +4.40      |
| Sept. | 4.05                    | 4.05       | 2.22                           | 2.22       | 55                 | 55         | -1.83                     | -1.83      |

Note: Amount shown in cumulative columns is total from month shown to present.

\* Revised since last month.

STREAMFLOW, IN CFS  
DELAWARE RIVER AT MONTAGUE, N.J.

| Month                | 1940-2008     |        |            | 2009<br>Monthly mean | Percent of<br>median |
|----------------------|---------------|--------|------------|----------------------|----------------------|
|                      | Maximum       | Median | Minimum    |                      |                      |
| September (observed) | 17,200 (2004) | 1,994  | 892 (1941) | 2,761                | 138                  |
| September (adjusted) | 18,310 (2004) | 1,524  | 324 (1964) | 2,405                | 158                  |
| October (observed)   | 15,690 (1955) | 2,449  | 807 (1941) |                      |                      |
| October (adjusted)   | 18,570 (1955) | 2,395  | 322 (1964) |                      |                      |